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ABSTRACT

Relatively little research exists on the relationship between adaptability and the structural aspects of self. The research that does exist suggests that a more mature personality, i.e., a self that is differentiated and integrated, has a greater capacity to adapt to crises. To identify the empirical relationship between three structural dimensions of self (unity, centrality, and differentiation) and adaptability, and to examine how these three structural dimensions change as a function of age, young (aged 21-34, N=17); middle aged (35-64, N=16); and older (65-82, N=16) adults completed self-descriptions on index cards. Zajonc's method for assessing cognitive constructs was used to determine the three structural dimensions of self. An embedded figures test was used to measure susceptibility to learned helplessness. Data analyses indicated that unity of self decreases as a function of age and that susceptibility to learned helplessness increases with age. The findings suggest that a strong negative correlation exists between unity of self and susceptibility to learned helplessness and that neither differentiation nor centrality of self varies significantly as a function of age. (PAS)

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THE NATURE OF SELF-STRUCTURE AND ADAPTABILITY BETWEEN EARLY AND LATE ADULTHOOD

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ABSTRACT

The ability to adapt to crises is a major issue in adulthood. Identifying which factors corresponds to positive versus negative adaptation is a topic of obvious importance. One explanation may be differences in the structure of self. Many psychological theories assume that unity, differentiation, and centrality of self correspond to adaptation. In addition, age differences in both adaptability and self structure are commonly indicated. The present study tests these assumptions in 3 age groups: young (aged 21-34, n=17); middle-aged (35-64, n=16); and older adults (65-82, n=16). Zajonc's measure of cognitive constructs was used to assess the structure of self. Adaptability was operationalized as the level of susceptibility to learned helplessness. Results indicate that unity of self decreases as a function of age. On the other hand, susceptibility to learned helplessness increases with age. As might be expected there is a strong negative correlation between unity of self and susceptibility to learned helplessness. Neither differentiation or centrality of self varied significantly as a function of age.

THE NATURE OF SELF-STRUCTURE AND ADAPTABILITY BETWEEN EARLY AND LATE ADULTHOOD

JANINA M. JOLLEY, Ph.D.

INTRODUCTION

The relationship between adult personality and adaptability has been frequently researched. Personality traits are often strong predictors of the ability to adapt or cope with crises (Lowenthal & Chiriboga, 1973; Valliant & McArthur, 1974). While this research has been productive, it has primarily focussed on the content or qualitative aspects of the self concept. There is relatively little research on the relationship between adaptability and the structural aspects of self.

This dearth of research is somewhat surprising in light of the fact that structural corollaries of both adaptibility and age periods are frequently hypothesized in current developmental and experimental research. For example, Kohlberg (1969), Erickson (1980), and Seligman (1975) all postulate a reorganization of self that accompanies adaptation to crises. In his book, "Helplessness: On depression, development, and death", Seligman describes the reorganization and unification that marks recovery from learned helplessness. Similarly, Kohlberg and Erickson depict adaptation to crises as a process of identity reorganization, unification, and increasing complexity. All of these writers hypothesize that a more mature personality, i.e., a self that is differentiated and integrated, has a greater capacity to adapt to crises.

While there does seem to be a consensus regarding the structural changes that occur in response to a crisis, there are divergent views regarding the structural changes that accompany aging. Development from early adulthood to middle adulthood is commonly described from a growth premise. In other words, it is depicted as a time of increasing roles and responsibilities leading to greater differentiation and hierarchical integration. While such growth may reflect a developmental ideal, casual observation as well as mental health statistics will inform you that not everyone adheres to this growth model. It seems obvious that development from young adulthood to middle adulthood may assume either a growth or nongrowth direction. This idea is clearly articulated in Erickson's dichotomous model. The model, of course, provides for development throughout the adult periods to pursue either a growth or nongrowth direction. One way of dealing with individual differences in development as a function of age is to measure these differences in the structure of the self.

As previously mentioned, there has been very little research on the relationships between adaptability and structural aspects of the adult self. Yet, there have been frequent references in the literature to such relationships. In fact, a survey of current self theory revealed that self theorists tend to concentrate on the effects of three structural dimensions. In this paper, those dimensions will be labelled unity, centrality, and differentiation of self. Unity of self refers to the degree of integration or interdependence of items within a self-construct. Centrality is the degree to which items concentrate or depend on a single core. That is, high centrality would mean that all

aspects of the self depend on a single role or trait. Finally, differentiation refers to the hierarchical structure of the self construct, including the number of categories and number of items in each category.

The theories of Werner (1978), Erickson (1980), Kohlberg (1969), and Riegel (1978) depict the development of self as a movement toward decreasing centrality, increasing differentiation, and increasing unity of self. Furthermore, Erickson and Seligman indicate that such growth increases a person's adaptability. In Seligman's terms, the changes in self that accompany recovery from learned helplessness inoculate a person from failing to adapt in the future. That is, these changes in self are supposed to prevent future episodes of learned helplessness.

One characteristic of a well-developed theory is that it is empirically supported. Since there is an absence of well-developed theory as to the relationship of structural variables to self, as well as an absence of research, the present study is designed to address two basic questions: First, what is the empirical relationship between these three structural dimensions of self (unity, centrality, and differentiation) and adaptability? Adaptability was operationalized as the degree to which a person was susceptible to learned helplessness. Second, how do the three structural dimensions of self (i.e., unity, centrality, differentiation) change as a function of age?

Method

Subjects: Participants represented three age groups: young adults aged 21-34 (n=17); middle-aged adults 35-64 (n=16); and elderly adults

aged 65-82 (n=16). All subjects were middle-class residents of central or southern Ohio.

Instruments:

Dimensions of Self: The three structural dimensions of self were determined using Zajonc's (1960) method for assessing cognitive constructs. His dimension of complexity was used to assess differentiation of self. Centrality of self was measured using his organization dimension. Finally, Zajonc's unity dimension measured unity of self. These dimensions were obtained as result of an individualized Q-sort based on self descriptions provided by each subject on index cards. In addition to sorting cards according to "what goes together", subjects were asked to rank order both the piles and cards within each pile. Finally, each card was systematically removed from the deck to determine the effect of that characteristic on all other items (Jolley, 1982). The formulas for the dimensions are:

$$\text{Differentiation} = \sum \text{Inr}$$

$$\text{Unity} = \sum \frac{\text{dep(Ai)}}{\text{n(n-1)}}$$

$$\text{Centrality} = \sum \frac{\text{det (Ai) max}}{\text{unity}}$$

Susceptibility to learned helplessness: An embedded figures task using eight geometric figures was designed to measure susceptibility to learned helplessness (Jolley, 1982). Similar materials have been used with success (Rholes, Blackwell, Jordon, & Walters, 1980). However, since most measures of learned helplessness confound ability, effort, and susceptibility to learned helplessness, a slightly different

procedure was implemented in this study (for complete rationale, see Jolley, 1982).

The first three tasks were solvable problems. The mean time taken on these three problems with effort subtracted out was the basis for measuring ability. The next two problems were unsolvable. The mean time taken on these two tasks before subjects gave up was the basis for the effort index. In addition, this was the treatment to induce learned helplessness. The next three cards were solvable. The mean time taken to solve these problems with ability subtracted out provided the index for susceptibility to learned helplessness. This index constituted the primary dependent variable. The cards in tasks 1-3 and 6-8 were counterbalanced.

Results and Discussion

As might be expected, older people were more susceptible to learned helplessness than younger people (table 1). This result was highly significant, $F(2,46) = 3.85$, p .05. Whether this finding is due to cohort differences or true age change is a topic for future research. Nevertheless, the present findings do show that today's young adults are better able to deal with crises than middle-aged or older adults.

If age is related to changes in susceptibility to learned helplessness, is it also related to changes in the structure of self? As can be seen in table 2, centrality and differentiation of self do not vary as a function of age. However, unity does change as a function of age. As indicated by the downward sloping line, unity declines with age. This effect is highly significant, $F(2,46) = 7.00$, p .01.

Thus, with age, we see an increase in susceptibility to learned helplessness and at the same time we see a decrease in unity. Could it be that unity itself is related to susceptibility to learned helplessness? As can be seen in table 3, susceptibility to learned helplessness is indeed related to unity. This relationship is a strong one, r= -.71, p .001. This finding supports both Seligman's and Erickson's premises that unity of self is related to adaptability.

Whereas unity corresponds to how interrelated items within a self construct are, centrality refers to how centered the self-concept is on a small core of self items. It might be hypothesized that when a self concept is focused on only a few self items, it is more vulnerable to crises when that core is threatened. This hypothesis was supported by a strong correlation between centrality and susceptibility to learned helplessness (table 3). It is interesting to note that although the elderly are more susceptible to learned helplessness than other age groups the correlation between susceptibility to learned helplessness and centrality is not significant for this age group. In addition, centrality does not vary significantly as a function of age. The meaning of these findings are not known.

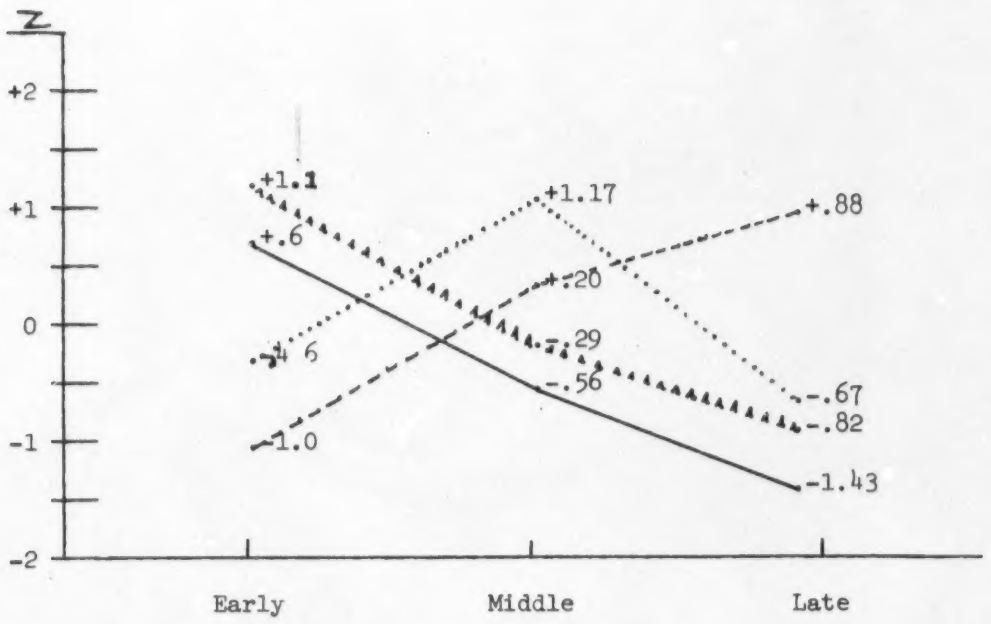
Prominent personality theorists have made assumptions regarding the relationship of adaptability to self-structure. However, prior to this research few have tested these assumptions. Clearly, the present research has just scratched the surface of this complex issue. Nevertheless, this research demonstrates that assumptions about the structure of self can be tested. Further research along these lines may lead to more adequate theory regarding the structure of self, adaptability, and aging.

Table 1

Analysis of Variance

	F	P
unity	7.00	< .01
differentiation	2.94	< .10
centrality	.31	---
susceptibility to learned helplessness	3.86	< .05

Table 2



unity ———

centrality .....

differentiation ^^^^^^

susceptibility to learned helplessness ------

Table 3

Pearson Product Moment Correlations for Susceptibility to Learned Helplessness

	Unity	Differentiation	Centrality
all age groups	-.71***	-.03	.46**
young adults	-.81***	.10	.73***
middle-age adults	-.91***	.06	.65***
old adults	-.38*	-.25	.19

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

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